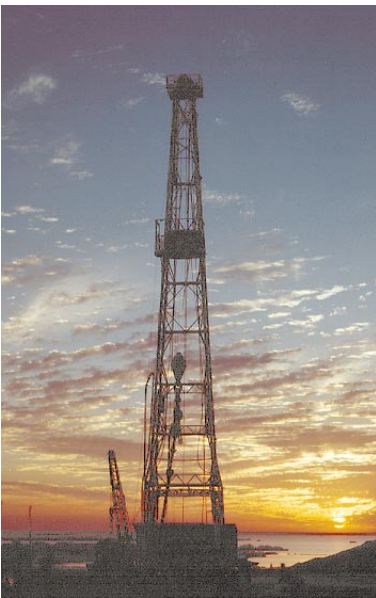


Natural Gas and Oil Downstream R&D

GOALS



Natural Gas Storage and Conversion

- By 2001, enhance deliverability of gas from underground storage, reduce costs of remediating deliverability in declining storage fields and reengineer techniques for existing storage fields. (Target: \$20 million per year in industry cost savings.)
- By 2010, develop technology for gas-to-liquid fuels (target: 500,000 bbl/day) and for upgrading low-quality gas (target 750 bcf/year).

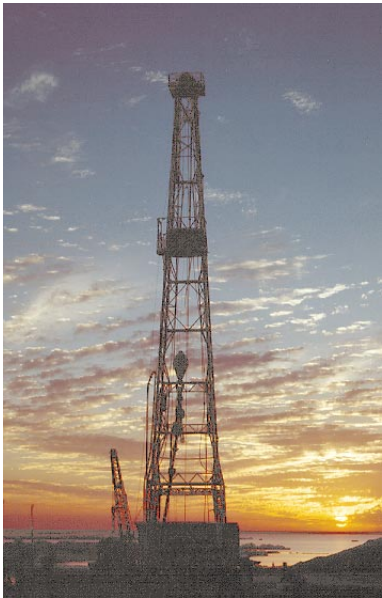
Oil Processing and Upgrading

- By 2000, improve refinery efficiency 2-3%, thereby reducing demand for imported oil by 250,000 bbls/day and avoiding shutdown of 7-8 refineries.

- Downstream of the oil or natural gas field, DOE research is also improving costs and efficiencies.
- In the Natural Gas Program, research is underway to improve the storage of natural gas, increasing customer confidence that gas is a reliable fuel source. Also, R&D is focused on advanced upgrading technologies to convert poor quality gas to pipeline standards and to produce liquid fuels from remote sources of gas.
- In the Oil Technology Program, DOE is working with the Nation's refiners to improve refinery efficiency and lower environmental compliance costs.

Natural Gas and Oil Downstream R&D

Budget



Program Components	FY95	FY96 Conf.	FY97 Request	Cost- Sharing
Natural Gas				
Storage	\$1.0	\$1.0	\$1.0	39%
Gas Processing	3.2	4.8	4.8	50%
Oil				
Processing Research and Downstream Operations	6.8	5.7	6.0	20%
Total	\$11.0	\$11.5	\$11.8	

- Downstream R&D activities involve improved storage, upgrading, and conversion processes to support the increased use of natural gas, and oil processing R&D to improve the operating efficiencies and lower environmental compliance costs for the nation’s oil refineries.